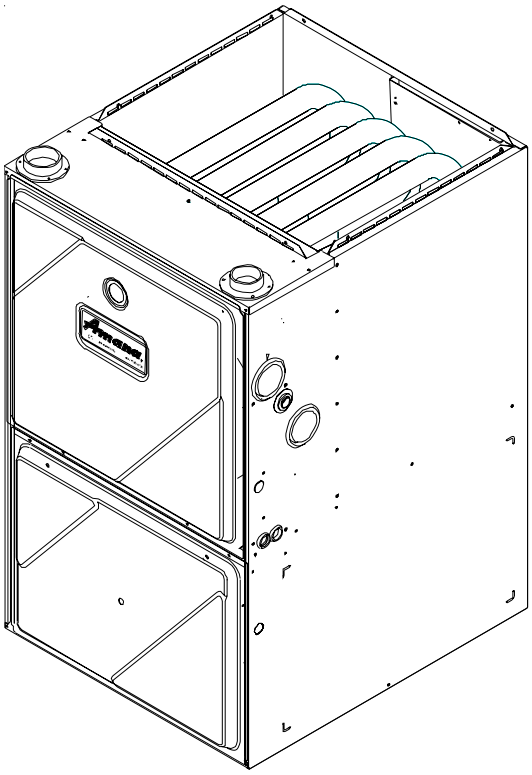
TECHNICAL INFORMATION MANUAL

AMS95
40" 95% Gas Furnace

Model numbers
listed on page 3.

- Refer to Service Manual RS660000x for installation, operation, and troubleshooting information.
- All safety information must be followed as provided in the Service Manual.
- Refer to the appropriate Parts Catalog for part number information.



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Heating & Air Conditioning
Amana
LASTS AND LASTS AND LASTS.™

This manual is to be used by qualified HVAC technicians only. Goodman does not assume any responsibility for property damage or personal injury due to improper service procedures performed by an unqualified person.

RT6612013 Rev. 1
November 2005

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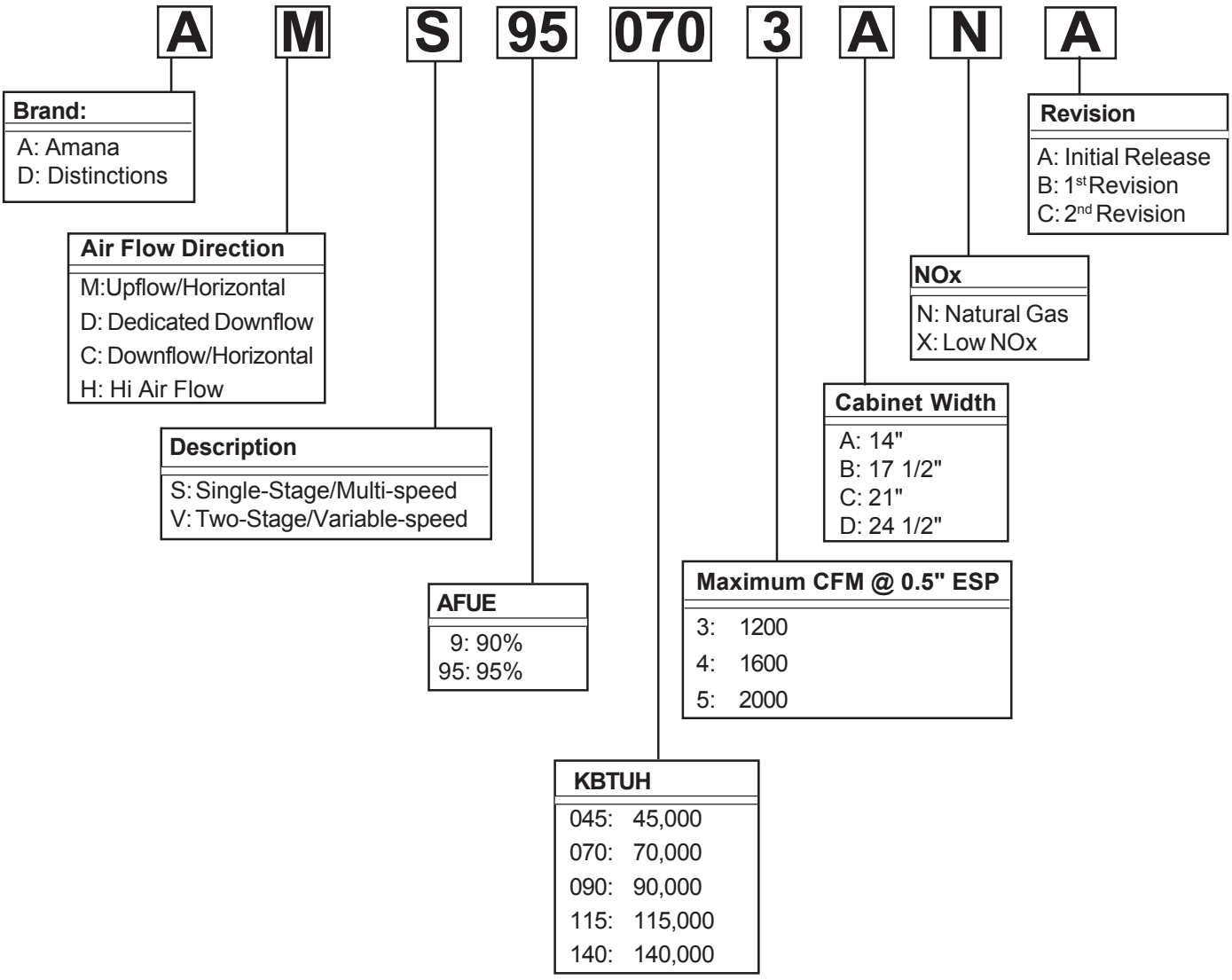
PRODUCT IDENTIFICATION

The model and manufacturing number are used for positive identification of component parts used in manufacturing. Please use these numbers when requesting service or parts information.



WARNING

HIGH VOLTAGE!

DISCONNECT ALL POWER BEFORE SERVICING. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

WARNING

ONLY INDIVIDUAL MEETING THE REQUIREMENTS OF AN "ENTRY LEVEL TECHNICIAN" AS SPECIFIED BY THE AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI) MAY USE THIS INFORMATION. ATTEMPTING TO INSTALL OR REPAIR THIS UNIT WITHOUT SUCH BACKGROUND MAY RESULT IN PRODUCT DAMAGE, PERSONAL INJURY, OR DEATH.

PRODUCT IDENTIFICATION

The model and manufacturing number are used for positive identification of component parts used in manufacturing. Please use these numbers when requesting service or parts information.

MODEL

AMS950453BXA

AMS950703BXA

AMS950704CXA

AMS950904CXA

AMS950905DXA

AMS951155DXA

⚠ WARNING

TO PREVENT THE RISKOF PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH, DO NOT STORE COMBUSTIBLE MATERIALS OR USE GASOLINE OR OTHER FLAMMABLE LIQUIDS OR VAPORS IN THE VICINITY OF THIS APPLIANCE.

⚠ WARNING

DO NOT CONNECT TO OR USE ANY DEVICE THAT IS NOT DESIGN CERTIFIED BY GOODMAN FOR USE WITH THIS UNIT. SERIOUS PROPERTY DAMAGE, PERSONAL INJURY, REDUCED UNIT PERFORMANCE AND/OR HAZARDOUS CONDITIONS MAY RESULT FROM THE USE OF SUCH NON-APPROVED DEVICES.

PRODUCT DESIGN

General Operation

The AMS95 furnaces are equipped with an electronic ignition device used to light the burners and an induced draft blower to exhaust combustion products.

An interlock switch prevents furnace operation if the blower door is not in place. Keep the blower access door in place except for inspection and maintenance.

This furnace is also equipped with a self-diagnosing electronic control module. In the event a furnace component is not operating properly, the control module LED will flash on and off in a factory-programmed sequence, depending on the problem encountered. This light can be viewed through the observation window in the blower access door. Refer to the *Troubleshooting Chart* for further explanation of the LED codes and *Abnormal Operation - Integrated Ignition Control* section in the Service Instructions for an explanation of the possible problem.

The rated heating capacity of the furnace should be greater than or equal to the total heat loss of the area to be heated. The total heat loss should be calculated by an approved method or in accordance with “ASHRAE Guide” or “Manual J-Load Calculations” published by the Air Conditioning Contractors of America.

*Obtain from: American National Standards Institute 1430 Broadway New York, NY 10018

Location Considerations

- The furnace should be as centralized as is practical with respect to the air distribution system.
- Do not install the furnace directly on carpeting, tile, or combustible material other than wood flooring.
- When suspending the furnace from rafters or joists, use 3/8" threaded rod and 2” x 2” x 3/8” angle as shown in the Installation and Service Instructions. The length of the rod will depend on the application and clearance necessary.
- When installed in a residential garage, the furnace must be positioned so the burners and ignition source are located not less than 18 inches (457 mm) above the floor and protected from physical damage by vehicles.

Notes:

1. Installer must supply one or two PVC pipes: one for combustion air (optional) and one for the flue outlet (required). Vent pipe must be either 2” or 3” in diameter, depending upon furnace input, number of elbows, length of run and installation (1 or 2 pipes). The optional Combustion Air Pipe is dependent on installation/code requirements and must be 2” or 3” diameter PVC.
2. Line voltage wiring can enter through the right or left side of the furnace. Low voltage wiring can enter through the right or left side of furnace.
3. Conversion kits for high altitude natural or propane gas operation are available. See High Altitude Derate chart for details.
4. Installer must supply the following gas line fittings, depending on which entrance is used:

   Left -- Two 90º Elbows, one close nipple, straight pipe.

   Right -- Straight pipe to reach gas valve.

Accessibility Clearances (Minimum)

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS (INCHES)						
POSITION*	**FRONT**	**SIDES**	**REAR**	**TOP**	**FLUE**	**FLOOR**
Upflow	3	0	0	1	0	C
Horizontal	3	6	0	6	0	C

*= All positioning is determined as installed unit is viewed from the front.

C= If placed on combustible floor, floor MUST be wood only.

NC= For instalaltion on non-combustible floors only. A combustible subbase must be used for installations on combustible flooring.

24" at front is required for servicing or cleaning.

Note: In all cases accessibility clearance shall take precedence over clearances from the enclosure where accessibility clearances are greater. All dimensions are given in inches.

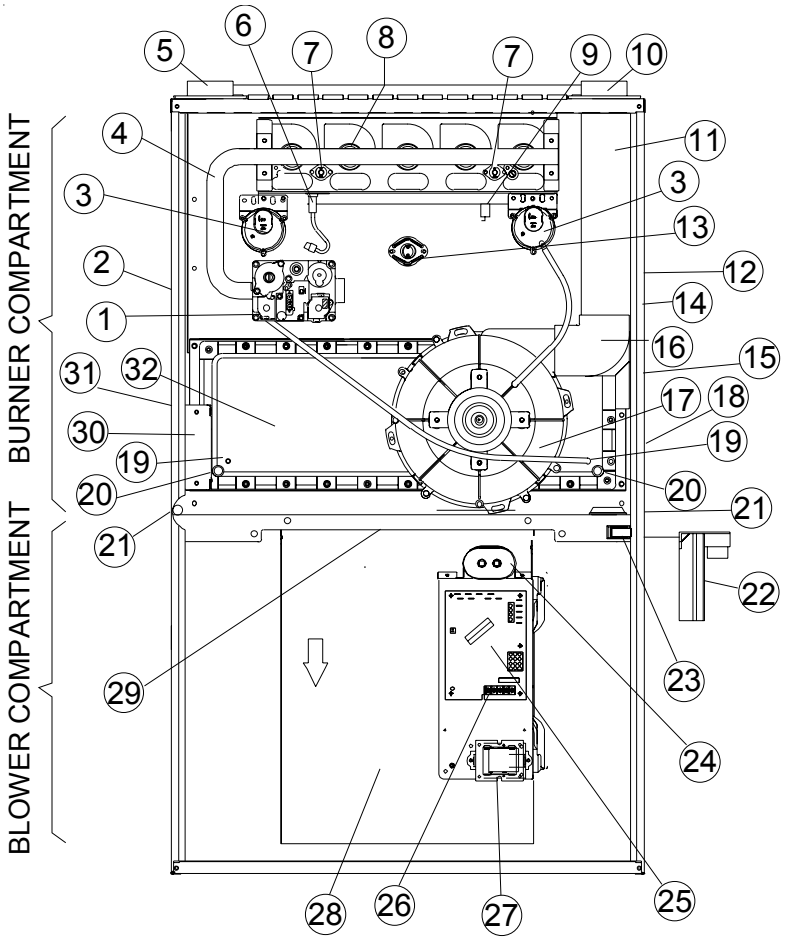
High Altitude Derate

When this furnace is installed at high altitude, the appropriate High Altitude orifice kit must be installed. This is required due to the natural reduction in the density of both the gas fuel and combustion air as altitude increases. The kit will provide the proper design certified input rate within the specified altitude range.

PROPANE AND HIGH ALTITUDE KITS					
MODEL NUMBER	**0 to 7,000 ft.**	**7,001 to 9,000 ft.**	**9,001 to 11,000 ft.**	**7,001 to 11,000 ft.**	**7,001 to 11,000 ft.**
AMS95**XA	**LPT-00A** Propane Conversion Kit (#55 Orifices)	**HANG11** High Altitude Natural Gas Kit (#44 Orifices)	**HANG12** High Altitude Natural Gas Kit (#45 Orifices)	**HALP 10** High Altitude LP Gas Kit (#56 Orifices)	**TBD**

High altitude kits are purchased according to the installation altitude and usage of either natural or propane gas. Refer to the chart above for a tabular listing of appropriate altitude ranges and corresponding manufacturer’s high altitude Natural Gas and Propane Gas kits. For a tabular listing of appropriate altitude ranges and corresponding manufacturer's High Altitude Pressure Switch kits, refer to either the *Pressure Switch Trip Points & Usage Chart* in this manual or the *Accessory Charts* in Service Instructions.

COMPONENT IDENTIFICATION

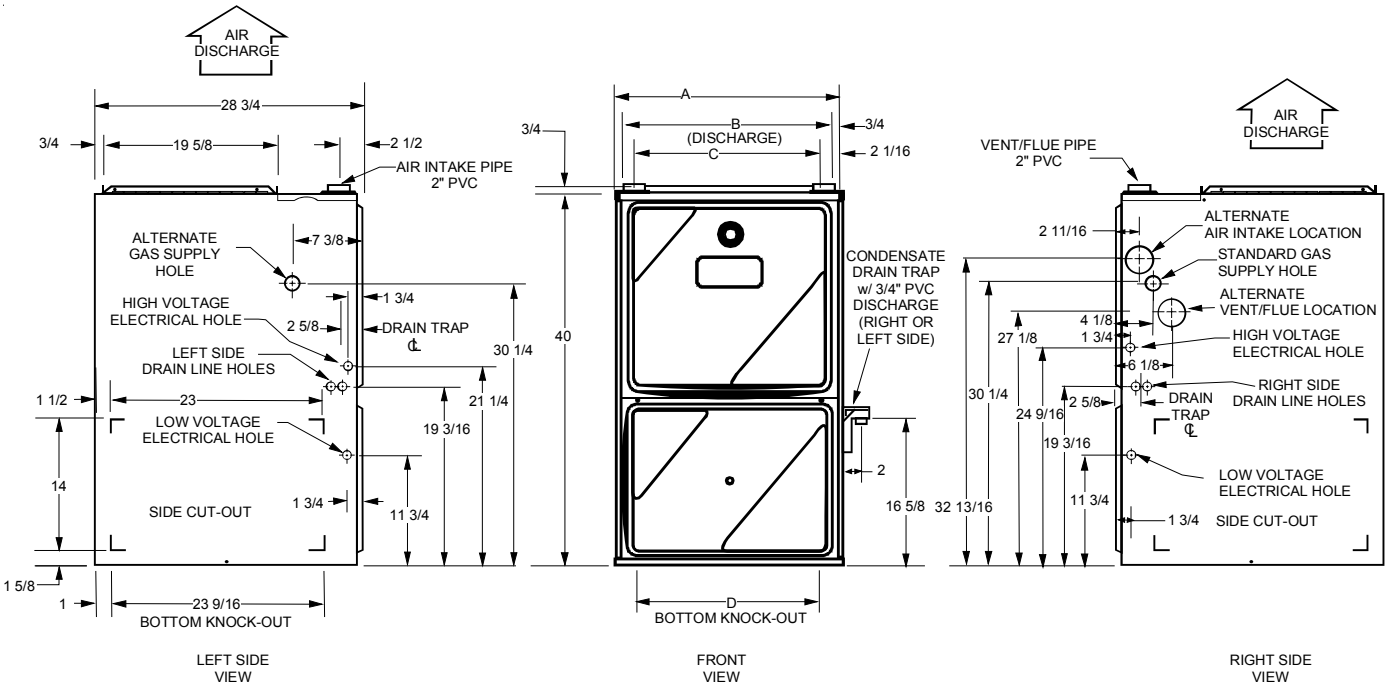


Upflow /Horizontal Models

1 Gas Valve
2 Gas Line Entrance (Alternate)
3 Pressure Switch(es)
4 Gas Manifold
5 Combustion Air Intake Connection / “Coupling”
6 Hot Surface Igniter
7 Rollout Limit
8 Burners
9 Flame Sensor
10 Flue Pipe Connection / “Coupling”
11 Flue Pipe (Internal)
12 Combustion Air Intake (Alternate)
13 Primary Limit
14 Gas Line Entrance
15 Flue Pipe Connection (Alternate)
16 Rubber Elbow
17 Induced Draft Blower
18 Electrical Connection Inlets (Alternate)
19 Coil Front Cover Pressure Tap
20 Coil Front Cover Drain Port
21 Drain Line Penetrations
22 Drain Trap
23 Blower Door Interlock Switch
24 Capacitor
25 Integrated Control Module (with fuse and diagnostic LED)
26 24-Volt Thermostat Connections
27 Transformer (40 VA)
28 Circulator Blower
29 Auxiliary Limit
30 Junction Box
31 Electrical Connection Inlets
32 Coil Front Cover

COMPONENT IDENTIFICATION

AMS95*****XA



Cabinet Size	A	B	C	D
AMS950453BXA AMS950703BXA	17-1/2	16	13-1/8	13-5/8
AMS950704CXA AMS950904CXA	21	19-1/2	16-1/8	17-1/2
AMS950905DXA AMS951155DXA	24-1/2	23	20-5/8	20-7/8

All dimensions are in inches.

PRODUCT DESIGN

PRESSURE SWITCH TRIP POINTS AND USAGE CHART											
MODEL	NEGATIVE PRESSURE ID BLOWER WITH FLUE NOT FIRING TYPICAL SEA LEVEL DATA[1]	NEGATIVE PRESSURE ID BLOWER WITH FLUE FIRING TYPICAL SEA LEVE DATA[2]	NEGATIVE PRESSURE COIL COVER WITH FLUE NOT FIRING TYPICAL SEA LEVEL DATA[1]	NEGATIVE PRESSURE COIL COVER WITH FLUE FIRING TYPICAL SEA LEVE DATA[2]	PRESSURE SWITCH TRIP POINTS AND USAGE						
					0 to 7,000 ft.				7,001 to 11,000 ft.		
					TRIP POINT COIL COVER PRESSURE SWITCH	COIL COVER PRESSURE SWITCH PART #	TRIP POINT ID BLOWER PRESSURE SWITCH	ID BLOWER PRESSURE SWITCH PART #	TRIP POINT COIL COVER PRESSURE SWITCH	TRIP POINT ID BLOWER PRESSURE SWITCH	HIGH ALTITUDE KIT
AMS950453BXA	-1.30	-1.10	-0.52	-0.37	-0.37	20197312	-1.10	0130F00000P	TBD	TBD	TBD
AMS950703BXA	-1.10	-0.95	-0.75	-0.60	-0.60	20197310	-0.95	0130F00002P	TBD	TBD	TBD
AMS950704CXA	-1.30	-1.10	-0.52	-0.37	-0.37	20197312	-1.10	0130F00000P	TBD	TBD	TBD
AMS950904CXA	-1.40	-1.20	-0.75	-0.60	-0.60	20197310	-1.20	0130F00001P	TBD	TBD	TBD
AMS950905DXA	-1.30	-1.10	-0.52	-0.37	-0.37	20197312	-1.10	0130F00000P	TBD	TBD	TBD
AMS951155DXA	-1.30	-1.10	-0.75	-0.60	-0.60	20197310	-1.10	0130F00000P	TBD	TBD	TBD

(1) Data given is least negative pressure required for pressure switch to close.
(2) Data given is the least negative pressure required for pressure switch to remain closed.

T.O.D. PRIMARY LIMIT					
Part Number	**20162903**	**20162904**	**20162905**	**20162906**	**20162907**
Open Setting (°F)	160	150	145	170	155
Color Code(s)	Blue	Brown	Yellow	White	Orange
AMS950453BXA		1			
AMS950703BXA	1				
AMS950704CXA	1				
AMS950904CXA		1			
AMS950905DXA	1				
AMS951155DXA				1	

PRODUCT DESIGN

ROLLOUT LIMIT SWITCHES			
Part Number	**10123514 or 10123533**	**10123515 or 10123534**	**10123517**
Open Setting (°F)	200	220	210
Color Code(s)	Yellow	Orange	White
AMS950453BXA	1		
AMS950703BXA	2		
AMS950704CXA	2		
AMS950904CXA	2		
AMS950905DXA	2		
AMS951155DXA	2		

AUXILIARY LIMIT SWITCHES				
Part Number	**10123525**	**10123535**	**10123518**	**10123519**
Open Setting (°F)	160	150	170	160
Color Code(s)	Orange	Red	Blue	Red-Red
AMS950453BXA		1		
AMS950703BXA		1		
AMS950704CXA		1		
AMS950904CXA		1		
AMS950905DXA		1		
AMS951155DXA				1

PRODUCT DESIGN

Coil Matches:

A large array of Amana® brand coils are available for use with the new AMS95 furnaces, in either upflow, counterflow or horizontal applications. These coils are available in both cased and uncased models, with or without a TXV expansion device. These new 95%+ furnaces match up with the existing Amana® brand coils as shown in the chart below.

Coil Matches (for Amana® brand units using R22):

CABINET WIDTH	FURNACE MODELS	AIRFLOW (tons)	CAUF UNCASED "A" COILS	CAUX UNCASED TXV "A" COILS	CACF CASED "A" COILS	CAPF CASED "A" COILS	CAPX CASED TXV "A" COILS	CHPF HORIZ. CASED "A" COIL	CHPX HORIZ. CASED TXV "A" COIL
17 1/2	AMS950453BXA AMS950703BXA	1 1/2 - 3	CAUF018B2* CAUF025B2* CAUF030B2* CAUF036B2* CAUF037B2* CAUF042B2* CAUF048B2*	CAUX018B2* CAUX025B2* CAUX036B2* CAUX037B2* CAUX042B2*	CACF030B2* CACF036B2* CACF042B2* CACF048B2*	CAPF018B2* CAPF025B2* CAPF030B2* CAPF039B2* CAPF036B2* CAPF037B2* CAPF042B2*	CAPX018B2* CAPX025B2* CAPX030B2* CAPX036B2* CAPX037B2* CAPX042B2*	CHPF036B2* CHPF042B2* CHPF048B2*	CHPX036B2* CHPX042B2*
21	AMS950704CXA AMS950904CXA	2 1/2 - 4	CAUF042C2* CAUF048C2* CAUF049C2* CAUF060C2* CAUF061C2*	CAUX049C2*	CACF042C2* CACF048C2* CACF060C2* CACF061C2*	CAPF036C2* CAPF042C2*	CAPX049C2*	CHPF048D2* CHPF060D2*	CHPX048D2* CHPX060D2*
24 1/2	AMS950905DXA AMS951155DXA	3 - 5	CAUF049D2* CAUF060D2* CAUF061D2*	CAUX049D2* CAUX060D2* CAUX061D2*	CACF060D2* CACF061D2*	CAPF049D2* CAPF060D2*	CAPX049D2* CAPX060D2* CAPX061D2*	CHPF048D2* CHPF060D2*	CHPX048D2* CHPX060D2*

Coil Matches (for Amana® brand units using R-410A):

CABINET WIDTH	FURNACE MODELS	AIRFLOW (tons)	CAUF UNCASED "A" COILS	CAUX UNCASED TXV "A" COILS	CAPF CASED "A" COILS	CAPX CASED TXV "A" COILS	CHPF HORIZ. CASED "A" COIL	CHPX HORIZ. CASED TXV "A" COIL
17 1/2	AMS950453BXA AMS950703BXA	1 1/2 - 3	CAUF030B4* CAUF036B4*	CAUX030B4* CAUX036B4* CAUX042B4*	CAPF030B4* CAPF036B4*	CAPX030B4* CAPX036B4*	CHPF036B4*	CHPX036B4*
21	AMS950704CXA AMS950904CXA	2 1/2 - 4	CAUF042C4* CAUF048C4* CAUF057D4*	CAUX042C4* CAUX048C4* CAUX057D4* CAUX060D4*	CAPF042C4*	CAPX042C4* CAPX048C4*		
24 1/2	AMS950905DXA AMS951155DXA	3 - 5		CAUX057D4* CAUX060D4*	CAPF057D4* CAPF060D4*	CAPX057D4* CAPX060D4*	CHPF048D4* CHPF060D4*	CHPX048D4* CHPX060D4*

PRODUCT DESIGN

Thermostats:

The following Amana® brand Thermostats are suggested for use with the AMS95 Furnace Models:

THERMOSTATS								
Thermostat	**Man/Auto**	**Programmable**	**Cool**	**Heat**	**Batt. Powered**	**Batt. Bkup**	**Shape**	**Color**
C5200607	Man. Changeover	No	1	1	No	No	Round	Gold
1213401	Man. Changeover	Yes	1	1	Yes	No	Rectangular	White
1213402	Man. Changeover	No	1	1	Yes	No	Rectangular	White
1213701	Auto Changeover	Yes	1	1	No	Yes	Rectangular	White

Filters:

Filters are required with this furnace and must be provided by the installer. The filters used must comply with UL900 or CAN/ULCS111 standards. Installing this furnace without filters will void the unit warranty.

Upflow Filters

This furnace has provisions for the installation of return air filters at the side and/or bottom return. The furnace will accommodate the following filter sizes depending on cabinet size:

SIDE RETURN		
Cabinet Width (in.)	Nominal Filter Size (in.)	Approx. Flow Area (in^2)
All	16 x 25 x 1	400

BOTTOM RETURN		
Cabinet Width (in.)	Nominal Filter Size (in.)	Approx. Flow Area (in^2)
17-1/2	14 x 25 x 1	350
21	16 x 25 x 1	400
24-1/2	20 x 25 x 1	500

Refer to Minimum Filter Area tables to determine filter area requirement. **NOTE:** Filters can also be installed elsewhere in the duct system such as a central return.

		COOLING AIRFLOW REQUIREMENT (CFM)						
		600	**800**	**1000**	**1200**	**1400**	**1600**	**2000**
Input__Airflow	0453BXA	388*	388*	480	576	---	---	---
	0703BXA	---	647*	647*	647*	672	---	---
	0704CXA	---	---	583*	583*	672	768	---
	0904CXA	---	---	863*	863*	863*	863*	---
	0905DXA	---	---	---	777*	777*	777*	960
	1155DXA	---	---	---	971*	971*	971*	971*

*Minimum filter area dictated by heating airflow requirement.

Disposable Minimum Filter Area (in^2)

[*Based on a 300 ft/min filter face velocity]*

		COOLING AIRFLOW REQUIREMENT (CFM)						
		600	**800**	**1000**	**1200**	**1400**	**1600**	**2000**
Input__Airflow	0453BXA	194*	194*	240	288	---	---	---
	0703BXA	---	324*	324*	324*	336	---	---
	0704CXA	---	---	291*	291*	336	384	---
	0904CXA	---	---	432*	432*	432*	432*	---
	0905DXA	---	---	---	388*	388*	388*	480
	1155DXA	---	---	---	486*	486*	486*	486*

*Minimum filter area dictated by heating airflow requirement.

Permanent Minimum Filter Area (in^2)

[Based on 600 ft/min filter face velocity]

FURNACE SPECIFICATIONS

MODEL	AMS95 0453BXA	AMS95 0703BXA	AMS95 0704CXA	AMS95 0904CXA	AMS95 0905DXA	AMS95 1155DXA
Btuh						
Input (US)	46,000	69,000	69,000	92,000	92,000	115,000
Output (US)	44,400	66,400	66,900	89,000	88,400	110,500
Input (CAN)	46,000	69,000	69,000	92,000	92,000	115,000
Output (CAN)	44,400	66,400	66,900	89,000	88,400	110,500
A.F.U.E.	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
Rated External Static (" w.c.)	.20 - .50	.20 - .50	.20 - .50	.20 - .50	.20 - .50	.20 - .50
Temperature Rise (°F)	35 - 65	30 - 60	35 - 65	30 - 60	35 - 65	35 - 65
ID Blower Pressure Switch Trip Point (" w.c.)	-1.10	-0.95	-1.10	-1.20	-1.10	-1.10
Front Cover Pressure Switch Trip Point (" w.c.)	-0.37	-0.37	-0.37	-0.60	-0.37	-0.37
Blower Wheel (D" x W")	10 x 8	10 x 8	10 x 10	10 x 10	11 x 10	11 x 10
Blower Horsepower	1/3	1/3	1/2	1/2	3/4	3/4
Blower Speeds	4	4	4	4	4	4
Max CFM @ 0.5 E.S.P.	1200	1200	1600	1600	2000	2000
Power Supply	115-60-1	115-60-1	115-60-1	115-60-1	115-60-1	115-60-1
Minimum Circuit Ampacity (MCA)	9.4	9.4	13.8	13.8	13.2	13.2
Maximum Overcurrent Device	15.0	15.0	15.0	15.0	15.0	15.0
Transformer (VA)	40	40	40	40	40	40
Heat Anticipator (Amps)	0.7	0.7	0.7	0.7	0.7	0.7
Primary Limit Setting (°F)	150	160	160	150	160	170
Auxiliary Limit Setting (°F)	150	150	150	150	150	160
Rollout Limit Setting (°F)	200	200	200	200	200	200
Fan Delay On Heating	30 secs.	30 secs.	30 secs.	30 secs.	30 secs.	30 secs.
Off Heating [1]	150 secs.	150 secs.	150 secs.	150 secs.	150 secs.	150 secs.
Fan Delay On Cooling	5 sec.	5 sec.	5 sec.	5 sec.	5 sec.	5 sec.
Off Cooling	45 secs.	45 secs.	45 secs.	45 secs.	45 secs.	45 secs.
Gas Supply Pressure (Natural/Propane) ("w.c.)	7 / 11	7 / 11	7 / 11	7 / 11	7 / 11	7 / 11
Manifold Pressure (Natural/Propane) ("w.c.)	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10
Orifice Size (Natural/Propane)	43 / 55	43 / 55	43 / 55	43 / 55	43 / 55	43 / 55
Number of Burners	2	3	3	4	4	5
Vent Connector Diameter (inches)[2]	2	2	2	2	2	2
Combustion Air Connector Diameter (inches)[3]	2	2	2	2	2	2
Shipping Weight (lbs.)	132	135	136	158	172	175

[1] Off Heating - This fan delay timing is adjustable (90, 120, 150 or 180 seconds), 150 seconds as shipped.
[2] See Installation Instructions for appropriate vent pipe diameter, length and number of elbows.
[3] See Installation Instructions for appropriate combustion air pipe diameter, length and number of elbows.

1. These furnaces are manufactured for natural gas operation. Optional kits are available for conversion to propane operation.
2. For elevations above 2000 feet the rating should be reduced by 4% for each 1000 feet above sea level. The furnace must not be derated, orifice changes should only be made if necessary for altitude.
3. The total heat loss from the structure as expressed in TOTAL BTU/HR must be calculated by the manufacturers method or in accordance with the "A.S.H.R.A.E. GUIDE" or "MANUAL J-LOAD CALCULATIONS" published by the AIR CONDITIONING CONTRACTORS OF AMERICA. The total heat loss calculated should be equal to or less than the heating capacity. Output based on D.O.E. test procedures, steady state efficiency times output.
4. Minimum Circuit Ampacity calculated as: (1.25 x Circulator Blower Amps) + I.D. Blower Amps.

BLOWER PERFORMANCE SPECIFICATIONS

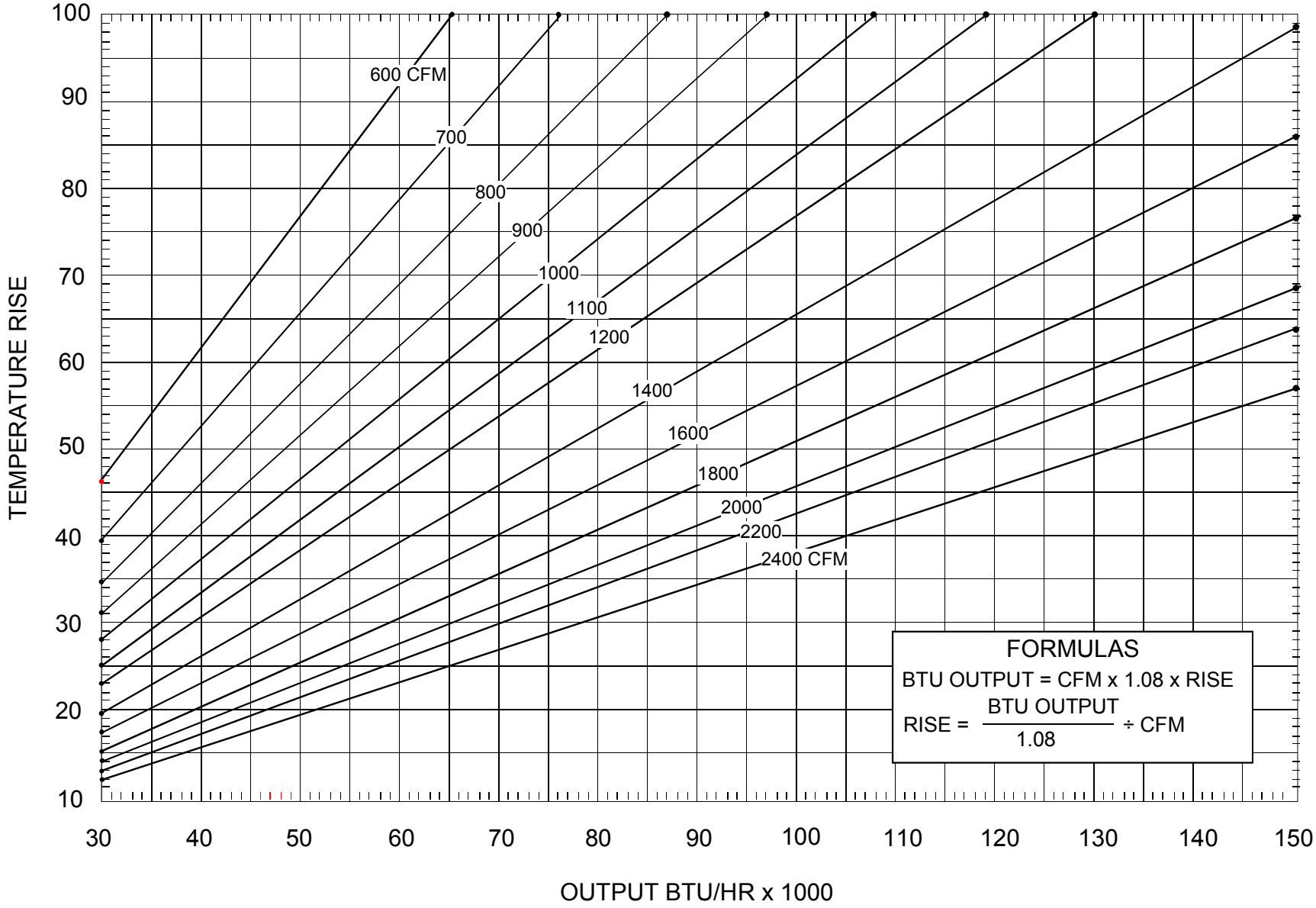
BLOWER PERFORMANCE
(CFM & Temperature Rise vs. External Static Pressure)

Model (Heating Speed As Shipped)	Motor Speed	Tons AC at 0.5" ESP	EXTERNAL STATIC PRESSURE (Inches Water Column)												
			0.1		0.2		0.3		0.4		0.5		0.6	0.7	0.8
			CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	CFM	CFM
	HIGH	3.0	1352	---	1318	---	1260	---	1202	---	1128	---	1044	955	853
AMS950453BXA	MED	2.5	1214	---	1172	---	1123	---	1064	---	1012	---	938	859	741
(LOW)	MED-LO	2.0	997	---	994	---	960	35	923	36	884	38	817	741	611
	LOW	1.5	757	44	753	44	734	45	704	47	674	49	620	524	438
	HIGH	3.0	1449	36	1409	37	1326	39	1273	41	1201	43	1194	1136	1018
AMS950703BXA	MED	2.5	1192	43	1172	44	1141	45	1094	47	1046	49	973	904	793
(MED-HI)	MED-LO	2.0	981	53	962	54	943	55	917	56	888	58	830	764	665
	LOW	1.5	750	---	730	---	714	---	692	---	657	---	620	570	502
	HIGH	4.0	2069	---	1965	---	1871	---	1756	---	1661	---	1549	1415	1275
AMS950704CXA	MED	3.5	1752	---	1724	---	1667	---	1603	---	1488	35	1402	1290	1082
(LOW)	MED-LO	3.0	1437	36	1437	36	1417	36	1369	38	1320	39	1256	1140	984
	LOW	2.5	1184	44	1177	44	1161	44	1132	46	1095	47	1047	928	837
	HIGH	4.0	1970	---	1874	35	1757	38	1667	40	1566	42	1431	1334	1182
AMS950904CXA	MED	3.5	1713	39	1650	40	1572	42	1510	44	1418	47	1313	1211	1079
(MED-LO)	MED-LO	3.0	1439	46	1412	47	1370	48	1327	50	1260	53	1166	1078	956
	LOW	2.5	1183	56	1155	57	1122	59	1108	60	1062	62	1011	931	816
	HIGH	5.0	2147	---	2114	---	2057	---	2030	---	1978	---	1889	1784	1713
AMS950905DXA	MED	4.0	1675	40	1686	---	1640	40	1623	41	1557	43	1501	1455	1360
(MED-LO)	MED-LO	3.5	1489	45	1470	45	1436	46	1409	47	1361	49	1318	1243	1130
	LOW	3.0	1307	51	1265	52	1234	54	1203	55	1168	57	1096	1053	991
	HIGH	5.0	2134	40	2103	40	2029	42	1941	44	1906	44	1818	1733	1625
AMS951155DXA	MED	4.0	1678	51	1643	52	1643	52	1577	54	1527	56	1489	1423	1339
(MED-HI)	MED-LO	3.5	1453	58	1440	59	1426	59	1363	62	1349	63	1314	1253	1205
	LOW	3.0	1259	67	1239	68	1220	70	1181	---	1159	---	1118	1082	1015

1. CFM in chart is without filters(s). Filters do not ship with this furnace, but must be provided by the installer.
2. All furnaces ship as high speed cooling. Installer must adjust blower cooling speed as needed.
3. For most jobs, about 400 CFM per ton when cooling is desirable.
4. INSTALLATION IS TO BE ADJUSTED TO OBTAIN TEMPERATURE RISE WITHIN THE RANGE SPECIFIED ON THE RATING PLATE.
5. The chart is for information only. For satisfactory operation, external static pressure must not exceed value shown on rating plate. The shaded area indicates ranges in excess of maximum external static pressure allowed when heating. The data for 0.6" w.c. to 0.8" w.c. is shown for air conditioning purposes only.
6 The dashed (---) areas indicate a temperature rise not recommended for this model.
7. The above chart is for U.S. furnaces installed at 0-4000 feet. At higher altitudes, a properly derated unit will have approximately the same temperature rise at a particular CFM, while the ESP at that CFM will be lower.

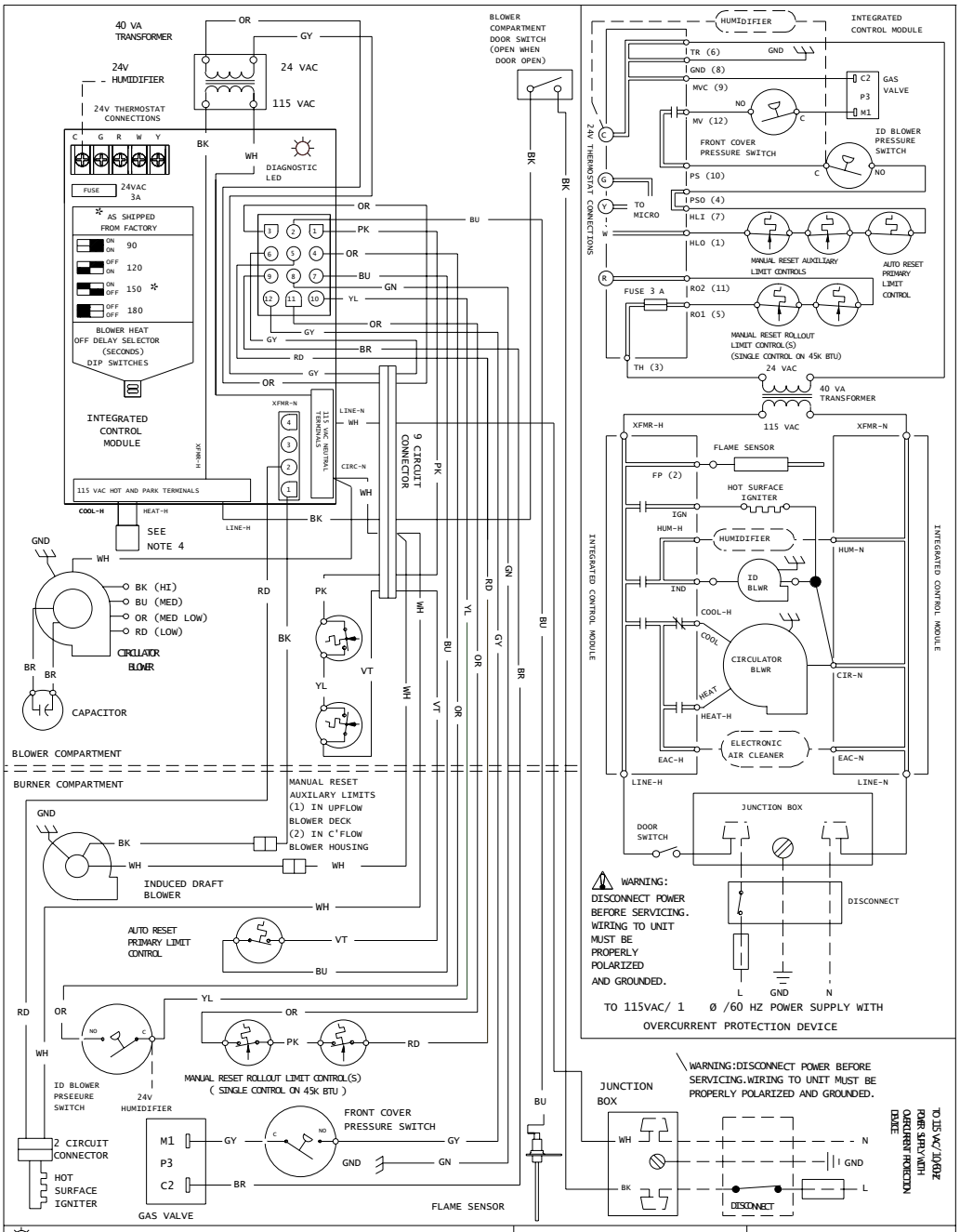
BLOWER PERFORMANCE SPECIFICATIONS

BTU OUTPUT vs TEMPERATURE RISE CHART



WIRING DIAGRAMS

WARNING **TO AVOID POSSIBLE ELECTRICAL SHOCK, PERSONAL INJURY, OR DEATH, DISCONNECT THE POWER BEFORE SERVICING.**



- 0 STEADY ON = NORMAL OPERATION
- OFF = CONTROL FAILURE
- 1 1 FLASH = SYSTEM LOCKOUT (RETRIES/RECYCLES EXCEEDED)
- 2 2 FLASHES = PRESSURE SWITCH STUCK CLOSED
- 3 3 FLASHES = PRESSURE SWITCH STUCK OPEN
- 4 4 FLASHES = OPEN HIGH LIMIT
- 5 5 FLASHES = FLAME SENSE WITHOUT GAS VALVE
- 6 6 FLASHES = OPEN ROLLOUT
- 7 7 FLASHES = LOW FLAME SIGNAL
- 8 8 FLASHES = CHECK IGNITER OR IMPROPER GROUNDING
- C CONTINUOUS/RAPID FLASHES = REVERSED 115 VAC POLARITY

LOW VOLTAGE (24V)
LOW VOLTAGE FIELD
HI VOLTAGE (115V)
HI VOLTAGE FIELD
JUNCTION
TERMINAL
INTERNAL TO INTEGRATED CONTROL
PLUG CONNECTION

EQUIPMENT GND
FIELD GND
FIELD SPLICE
SWITCH (TEMP.)
IGNITER
SWITCH (PRESS.)
OVERCURRENT PROT. DEVICE

COLOR CODES:

YL YELLOW	PK PINK
OR ORANGE	BR BROWN
VT VIOLET	WH WHITE
GN GREEN	BU BLUE
BK BLACK	GY GRAY
	RD RED

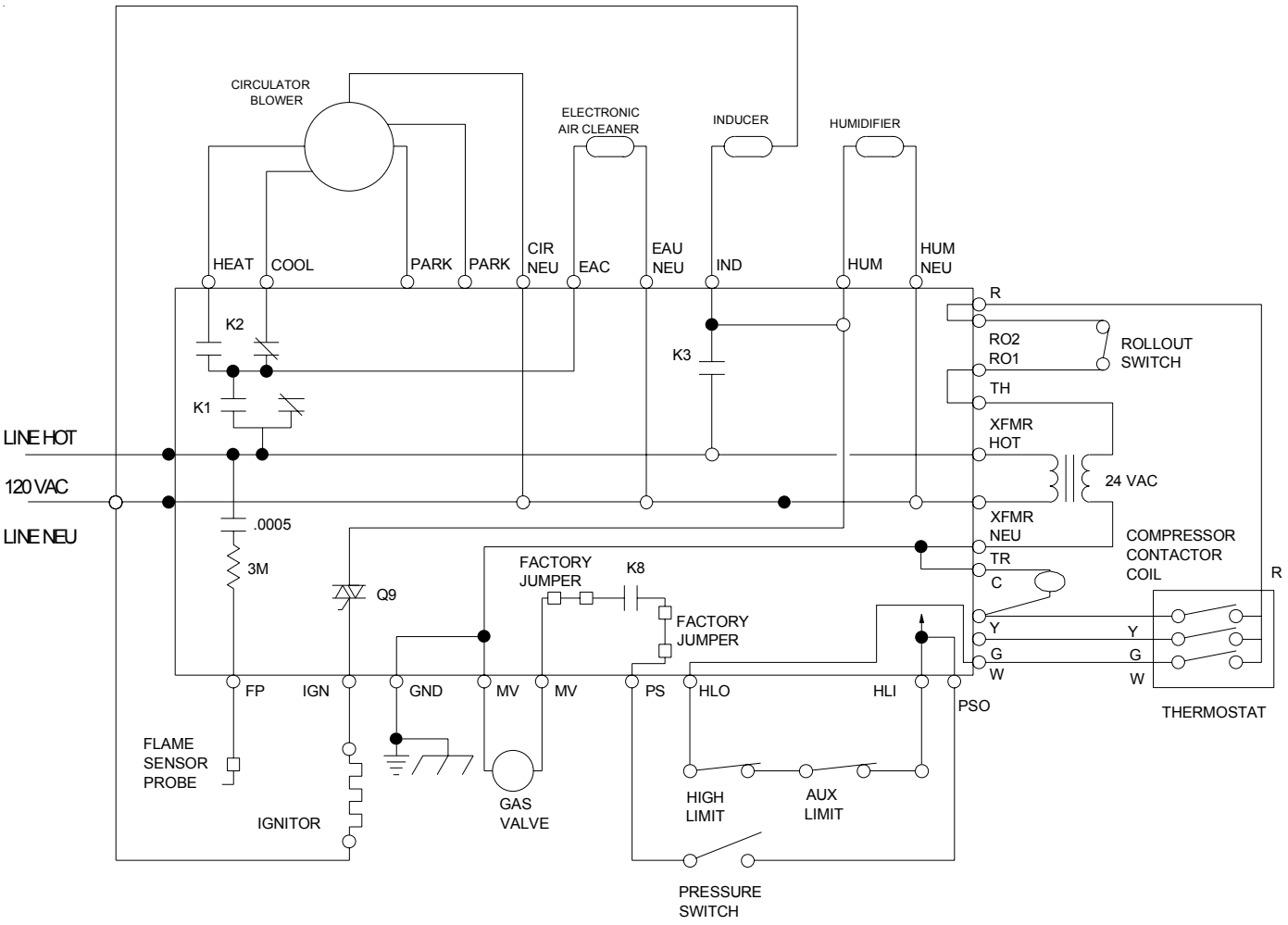
22314901 REV.01

NOTES:
1. SET HEAT ANTICIPATOR ON ROOM THERMOSTAT AT 0.7 AMPS.
2. MANUFACTURER'S SPECIFIED REPLACEMENT PARTS MUST BE USED WHEN SERVICING.
3. IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE FURNACE MUST BE REPLACED, IT MUST BE REPLACED WITH WIRING MATERIAL HAVING A TEMPERATURE RATING OF AT LEAST 105 °C. USE COPPER CONDUCTORS ONLY.
4. IF HEATING AND COOLING BLOWER SPEEDS ARE NOT THE SAME DISCARD JUMPER BEFORE CONNECTING BLOWER LEADS. UNUSED BLOWER LEADS MUST BE PLACED ON "PARK" TERMINALS OF INTEGRATED CONTROL OR TAPED.
5. UNIT MUST BE PERMANENTLY GROUNDED AND CONFORM TO N.E.C. AND LOCAL CODES.

Wiring is subject to change, always refer to the wiring diagram on the unit for the most up-to-date wiring.

SCHEMATICS

WARNING **TO AVOID POSSIBLE ELECTRICAL SHOCK, PERSONAL INJURY, OR DEATH, DISCONNECT THE POWER BEFORE SERVICING.**



TYPICAL SCHEMATIC
AMS95***XA MODEL FURNACES**
WHITE-RODGERS 50A65-289 INTEGRATED IGNITION CONTROL
This schematic is for reference only. Not all wiring is as shown above, refer to the appropriate wiring diagram for the unit being serviced.